

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

#2 / PreAmdt. A
1-31-02
Ratko

In re Application of: :
: Thomas G. Ference et al. :
: :
Serial No.: New : Art Unit: Unassigned
: :
Filed: November 5, 2001 : Examiner: Unassigned
: :
For: ULTRA-FINE CONTACT : Atty Docket: IBM - BUR919980202US2
ALIGNMENT : CBLH- 21806/0143
: :
: :
: :

PRELIMINARY AMENDMENT

Commissioner for Patents
Washington, D.C. 20231

November 5, 2001

Sir:

The following preliminary amendments and remarks are respectfully submitted in connection with the above-identified application. Entry of the Preliminary Amendment is requested before calculation of any fees for excess claims.

IN THE SPECIFICATION

Please add the following heading and paragraph before line 5, page 1 of the Specification:

CROSS-REFERENCE TO RELATED APPLICATIONS

This application is a divisional application of co-pending U.S. application 09/261,328 by Thomas G. Ference and Wayne J. Howell, filed on March 3, 1999 for "ULTRA-FINE CONTACT ALIGNMENT", the entire contents of which are hereby incorporated by reference, and for which priority is claimed under 35 U.S.C. §120.

IN THE CLAIMS

✓
Please cancel claims 1-25 without prejudice or disclaimer of the subject matter contained therein.

Please add the following new claims:

A²
54. The method of claim 26, further comprising arranging the first solder bumps around a periphery of an area containing the contacts.

55. The method of claim 26, wherein the step of reflowing the first solder bumps for surface tension aligning of the contacts includes aligning a plurality of controlled collapse chip connection contacts.

56. The method of claim 26, further comprising ensuring that the first solder bumps are free of connection with any of the contacts.

57. The method of claim 26, wherein the step of providing contacts on one of the first substrate and the second substrate comprises providing a plurality of second solder bumps each having a volume smaller than a volume of each of the plurality of first solder bumps.

REMARKS

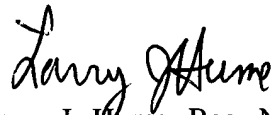
Claims 26-57 are pending in the present application. Claim 26 is independent. Claims 1-25 have been canceled, and claims 54-57 have been added by this Preliminary Amendment.

Applicants respectfully submit that this Preliminary Amendment places the Divisional Application in condition for allowance, and an early indication of the same would be greatly appreciated.

If the Examiner has any questions or requires clarification, the Examiner may contact the undersigned attorney so that this Application may continue to be expeditiously advanced.

The Commissioner is hereby authorized to charge any fees, or credit any overpayment, associated with filing fees and excess claim fees to IBM Deposit Account No. 09-0456.

Respectfully submitted,



Larry J. Hume, Reg. No. 44,163
Connolly Bove Lodge & Hutz LLP
1990 M Street, N.W.
Washington, D.C. 20036-3425
Telephone: 202-331-7111